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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/759,596

01/15/2004

Christopher Newell Toomey

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EXAMINER

KHOSHNOODI, NADIA

ART UNIT

PAPER NUMBER

2437

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DELIVERY MODE

02/17/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/759,596	Applicant(s) TOOMEY, CHRISTOPHER NEWELL	
	Examiner NADIA KHOSHNOODI	Art Unit 2437	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,8-10,12-16,19-29,32-38,41,42,45-47,49-53,56-66 and 69-78 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,8-10,12-16,19-29,32-38,41,42,45-47,49-53,56-66 and 69-78 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/18/2008 has been entered.

Response to Amendment

Claims 2-3, 6-7, 11, 17-18, 30-31, 39-40, 43-44, 48, 54-55, 67-68, & 75-94 are cancelled. Applicant's arguments/amendments with respect to pending claims 1, 4-5, 8-10, 12-16, 19-29, 32-38, 41-42, 45-47, 49-53, 56-66, & 69-74 filed 12/18/2008 have been fully considered but are moot in view of new grounds rejection.

Claim Rejections - 35 USC § 112

I. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

II. Claims 1, 4-5, 8-10, 12-16, 19-29, 32-38, 41-42, 45-47, 49-53, 56-66, & 69-74 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 1 and 38:

These claims are incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: between the transmitting step and the step where requests are processed, it seems that there should be a step which shows a particular step which determines how the request received is either trusted or untrusted.

Examiner presumes that in order to process the requests properly, there should be some type of assessment before concluding that the entity is trusted and is subjected to a first policy or whether it should be dealt with using a second policy.

****Claims not specifically addressed are rejected by virtue of their dependency.**

Claim Rejections - 35 USC § 103

III. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

IV. Claims 1, 4-5, 8-9, 12-16, 19-28, 32-33, 35-36, 38, 41-42, 45-46, 49-53, 56-65, 70, and 72-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goertzel et al., US Patent No. 6,308,273 and further in view of Hibberd, US Patent No. 7,454,794.

As per claims 1 and 38:

Goertzel et al. substantially teach a method/computer program product on a computer readable medium, comprising the steps of: identifying entities legitimately entitled to service, wherein an entity comprises a user ID-client pair, said user id-client pair comprising an individual user-machine combination (col. 6, lines 30-35 and col. 7, lines 5-9); establishing said

identified entities as trusted entities by issuing a trust token for each entity successfully authenticating to said network service, said trust token comprising a data object that includes a client identifier, said client identifier comprising at least one item of data that can be used to uniquely identify the client machine, wherein a user ID-client pair represents a unique entity (col. 5, lines 12-58 and col. 10, lines 38-55)); storing said issued trust token on said client (col. 9, lines 3-19); transmitting said stored issued trust token along with said user ID, authentication credentials, and client identifier from said client to network service (col. 8, lines 34-43); processing requests from said trusted entities according to a first policy (col. 7, lines 1-37); and processing remaining requests according to at least a second policy (col. 7, lines 1-37).

Not explicitly disclosed is wherein processing remaining requests according to at least a second policy comprises adding a specified amount of incremental response latency when processing untrusted logins, wherein untrusted logins comprise successful and unsuccessful logins from entities determined to lack a trust token. However, Hibberd teaches that a client's identifier is used to verify the entity as an authorized entity and subjects the client to a rate limit until the verification step has been successfully completed (col. 3, lines 44-53). Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Goertzel et al. to process requests from clients that are not trusted should be subjected to rate limiting procedures. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since Hibbard suggests that adding incremental response latency for untrusted connections from a particular client can limit the amount of damage a hacker/untrusted entity can do to a system in col. 3, lines 18-30.

As per claims 4 and 41:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 1 and 39. Furthermore, Goertzel et al. teach wherein entities legitimately entitled to service comprise entities previously able to successfully authenticate to a network service (col. 6, lines 1-12).

As per claims 5 and 42:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 4 and 41. Furthermore, Goertzel et al. teach wherein said network service comprises a server (col. 5, lines 4-11).

As per claims 8 and 45:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 1 and 38. Furthermore, Goertzel et al. teach said data object including: said user ID or a derivative thereof (col. 9, lines 5-19).

As per claims 9 and 46:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 8 and 45. Furthermore, Goertzel et al. teach wherein said derivative comprises a cryptographic hash of the user ID (col. 11, lines 54-60).

As per claims 12 and 49:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 11 and 38. Furthermore, Goertzel et al. teach said client identifier comprising any of: a client identifier assigned by said network service; and a client

identifier provided by the client (col. 6, lines 1-12).

As per claims 13 and 50:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 7 and 45. Furthermore, Goertzel et al. teach further comprising a step of encrypting said trust token (col. 17, lines 6-14).

As per claims 14 and 51:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claim 13 and 50. Furthermore, Goertzel et al. teach further comprising the step of: transmitting said trust token from said network service to said client upon successful authentication to said network service by said entity (col. 16, lines 35-54).

As per claims 15 and 52:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 14 and 51. Furthermore, Goertzel et al. teach wherein said step of transmitting said trust token occurs via a secure channel (col. 17, lines 6-14).

As per claims 16 and 53:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 15 and 52. Furthermore, Goertzel et al. teach wherein said secure channel comprises a network connection secured via the SSL (secure sockets layer) protocol (col. 17, lines 6-14).

As per claims 19 and 56:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 1 and 38. Furthermore, Goertzel et al. teach wherein said

Art Unit: 2437

step of transmitting said stored, issued trust token occurs via a secured channel (col. 17, lines 6-14).

As per claims 20 and 57:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 19 and 56. Furthermore, Goertzel et al. teach wherein said secured channel comprises a network connection secured via the SSL (secure sockets layer) protocol (col. 17, lines 6-14).

As per claims 21 and 58:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 12 and 50. Furthermore, Goertzel et al. teach further comprising a step of storing said issued trust token in a server side database, indexed according to a combination of user ID and client identifier (col. 7, lines 1-15 and col. 8, lines 34-44).

As per claims 22 and 59:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 21 and 58. Furthermore, Goertzel et al. teach further comprising the step of: transmitting said client identifier assigned by said network service from said network service to said client upon successful authentication to said network service by said entity (col. 16, lines 35-54).

As per claims 23 and 60:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 22 and 59. Furthermore, Goertzel et al. teach wherein

said step of transmitting said client identifier assigned by said network service occurs via a secure channel (col. 17, lines 6-14).

As per claims 24 and 61:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 22 and 59. Furthermore, Goertzel et al. teach wherein said secure channel comprising a network connection secured via the SSL (secure sockets layer) protocol (col. 17, lines 6-14).

As per claims 25 and 62:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 21 and 58. Furthermore, Goertzel et al. teach the method/ computer program product on a computer readable medium further comprising the steps of: transmitting said user ID and client identifier to said server; and retrieving said stored trust token from said database (col. 8, lines 34-62).

As per claims 26 and 63:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 21 and 58. Furthermore, Goertzel et al. teach wherein said server side database serves a plurality of services (col. 8, lines 34-43).

As per claims 27 and 64:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 2 and 40. Furthermore, Goertzel et al. teach wherein processing requests from said trusted entities according to a first policy comprises the steps of: validating said trust token (col. 7, lines 1-15 and col. 9, lines 5-39); and processing request

without adding incremental response latency (col. 7, lines 16-19 and col. 9, lines 39-43).

As per claims 28 and 65:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 27 and 64. Furthermore, Goertzel et al. teach wherein said step of validating said trust token comprises the step of: verifying that the user ID and a client identifier in the trust token match those presented by the client on the request (col. 9, lines 5-39).

As per claim 32:

Goertzel et al. and Hibbard substantially teach the method of claim 31. Furthermore, Hibbard teaches wherein response latency is added to a configurable percentage of successful untrusted logins (col. 4, lines 19-48).

As per claims 33 and 70:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 1 and 38. Furthermore, Hibbard teaches wherein processing remaining requests according to at least a second policy comprises adding a specified amount of incremental response latency when processing requests from untrusted IP addresses that have exceeded a configurable login rate (col. 3, lines 14-30).

As per claims 35 and 72:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 1 and 39. Furthermore, Goertzel et al. teach wherein said policies are applied by a server (col. 8, lines 34-43 and col. 10, lines 38-63).

As per claims 36 and 73:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 35 and 72. Furthermore, Hibbard teaches wherein said server applies rate policies for a plurality of network devices (col. 2, lines 39-55).

V. Claims 10, 29, 37, 47, 66, and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goertzel et al., US Patent No., 6,308,273 and Hibbard, US Patent No. 7,454,794 as applied to claims 6, 8, 28, 38, 45, and 65 above, and further in view of Pallante, US Pub. No. 2003/0028495.

As per claims 10 and 47:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 8 and 45. Not explicitly disclosed is wherein said data object further includes any of: a time stamp of first authentication to said network service by said entity; and a time stamp of a most recent authentication to said network service by said entity. However, Pallante teaches that logs are kept with timestamps of when users were authenticated in order to access documents. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Goertzel et al. to maintain a time stamp for a first and most recent authentication when the entity accesses the system. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since Pallante suggests that time-stamping and maintaining a log with the time-stamping information is important in non-repudiation proofs in par 154.

As per claims 29 and 66:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 28 and 65. Not explicitly disclosed is wherein said step of validating said trust token further comprises any of the steps of: verifying that a time stamp of a first authentication by the entity recorded in the trust token is no earlier than a configurable earliest acceptable first-authentication time stamp; and verifying that a time stamp of a last authentication by the entity recorded in the trust token is no earlier than a configurable earliest acceptable last-authentication time stamp. However, Pallante teaches wherein the token is a certificate which holds a validity period of when the entity can gain access to the system. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Goertzel et al. to enhance the security of the system by using a certificate instead of a password as the trust token and to allow access based on the validity period as defined by the certificate. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since Pallante suggests that using a certificate and abiding by the validity periods is important to ensure that entities do not gain access unless they are allowed based on their privileges in par. 99.

As per claims 37 and 74:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 6 and 38. Not explicitly disclosed is further comprising the step of: updating said trust token after a login by a trusted entity. However, Pallante teaches that the trusted token may be a certificate in order to increase security, as well as renewing certificates when appropriate. Therefore, it would have been obvious to a person in the art at the

time the invention was made to modify the method disclosed in Goertzel et al. to use a certificate as the trust token and to renew it when necessary. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since Pallante suggests that renewing a certificate will further ensure that appropriate entities gain access to resources for the full duration of the amount of time they are entitled to do so in par. 51.

VI. Claims 34 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goertzel et al., US Patent No., 6,308,273 and Hibbard, US Patent No. 7,454,794 as applied to claims 1 and 38 above, and further in view of Card, US Pub. No. 2002/0073339.

As per claims 34 and 71:

Goertzel et al. and Hibbard substantially teach the method/computer program product on a computer readable medium of claims 1 and 38. Not explicitly disclosed is wherein processing remaining requests according to at least a second policy comprises requiring an untrusted entity to complete a Turing test. However, Card teaches that questioning the user based on information that only the user would know allows for stronger authentication. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Goertzel et al. to subject an untrusted entity to complete a Turing test in order to determine whether or not that user is a valid user or if the user should remain untrusted. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since Card suggests that requiring the user to answer a security question, which is known only to that user, in order to establish whether or not he/she should be trusted allows for stronger authentication in par. 43.

VII. Claim 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goertzel et al., US Patent No., 6,308,273 and Hibbard, US Patent No. 7,454,794 as applied to claim 38 above, and further in view of Malan, US Pub. No. 2002/0032793.

As per claim 69:

Goertzel et al. and Hibbard substantially teach the computer program product on a computer readable medium of claim 38. Not explicitly disclosed is wherein response latency is added to a specified percentage of successful logins. However, Malan et al. teach that if malicious use of the network resources is detected based on malicious activity on a connection (regardless of whether or not the entity is trusted), that particular connection may be subjected to a cut-back on the connection rate (par. 69-70). Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Goertzel et al. to add incremental response latency if an untrusted login has been detected. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since Malan et al. suggest that when malicious activity is detected an important measure in preventing an attack is to contain the amount of damages that may be incurred in par. 67-68.

**References Cited, Not Used*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No. 6,510,513 has been cited because it is relevant due to the manner in which the invention has been claimed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nadia Khoshnoodi whose telephone number is (571) 272-3825. The examiner can normally be reached on M-F: 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nadia Khoshnoodi/
Examiner, Art Unit 2437
2/12/2009

NK

/Emmanuel L. Moise/
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